

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MEINO VON SPRECKELSEN

Appeal No. 1997-1339
Application 08/086,825

ON BRIEF

Before THOMAS, KRASS, and DIXON, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellant has appealed to the Board from the examiner's final rejection of claims 17 through 31 which constitute all the claims in the application.

Representative claim 17 is reproduced below:

17. A method for producing a circular color distribution on a recording medium, comprising the steps of:

storing color values as a function of a range of spacings to be used later when determining center-to-center spacings between a center for the circular color distribution and a plurality of picture elements on the recording medium;

determining said center for said concentrically arranged circular color distribution to be produced;

determining a center-to-center spacing of a center of a first picture element on a recording medium from the center of the distribution, and assigning a color value for the first picture element that corresponds to said spacing according to said stored function;

determining a center-to-center spacing for a second picture element which is a neighboring picture element to said first picture element by evaluating said center-to-center spacing of said first picture element and deriving the center-to-center spacing for the second picture element from the center-to-center spacing of said first picture element by using linear transformation steps, and assigning a color value for said second picture element that corresponds to said center-to-center spacing of said second picture element according to said stored function;

determining additional center-to-center spacings and corresponding color values for additional color picture elements according to said stored function, said additional center-to-center spacings being determined from center-to-center spacings of neighboring picture elements and by use of only linear transformation steps; and

employing the determined color values for point-by-point and line-by-line recording of the circular color distribution on the recording medium.

There are no references relied on by the examiner.

Claims 17 through 31 stand rejected under 35 U.S.C. § 101 as being directed to nonstatutory subject matter. Rather than repeat the positions of the appellant and the examiner, reference is made to the briefs and the answer for the respective details thereof.

OPINION

We reverse the rejection of claims 17 through 31 under 35 U.S.C. § 101.

Respective independent method claim 17 and apparatus claim 31 recite essentially the same subject matter. Representative method claim 17 in its preamble sets forth a "method for producing a circular color distribution on a recording medium." Data with respect to certain picture elements are stored and then certain operations, including mathematical operations, are set forth in the body of the claim with respect to these picture elements or pixels. These include determining a center-to-center spacing of a center of a picture element on a recording medium. Other operations with respect to these picture elements are set forth in the other steps and clauses of the claims on appeal. Finally, the determined color values are employed "for point-by-point and line-by-line recording of the circular color distribution on the recording medium."

It is thus apparent that independent claims 17 and 31 do not per se recite mathematical operations alone as a whole. It is permitted to utilize or set forth mathematical relationships in claims directed to processes and machines. Here the operations are upon pixels and their placement on a recording medium, which is clearly a practical application.

The examiner's reasoning in part was based upon the so-called Freeman-Walter-Abele test. However, the Court of Appeals for the Federal Circuit recently indicated in

State Street Bank & Trust Co. v. Signature Financial Group, Inc., 149 F.3d 1368, 1374, 47 USPQ2d 1596, 1601 (Fed. Cir. 1998), that "application of the test could be misleading, because a process, machine, manufacture, or composition of matter employing a law of nature, natural phenomenon, or abstract idea is patentable subject matter even though a law of nature, natural phenomenon, or abstract idea would not, by itself, be entitled to such protection." In other words, "a claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula, computer program or digital computer." Diamond v. Diehr, 450 U.S. 175, 187, 209 USPQ 1, 8 (1981).

Finally, it is apparent that the court in State Street favored a more common sense approach of determining whether the claimed subject matter "constitutes a practical application of a mathematical algorithm, formula, or calculation." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601. The court in State Street indicated that the focus of a statutory subject analysis should be "on the essential characteristics of the subject matter, in particular, its practical utility." State Street, 149 F.3d at 1375, 47 USPQ2d at 1602. Note also the reinforcement of these principles in AT&T Corp. v. Excel Communications, Inc., 172 F.3d 1352, 50 USPQ2d 1447 (Fed. Cir.1999).

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In view of the foregoing, the decision of the examiner rejecting claims 17 through 31 under 35 U.S.C. § 101 is reversed.

REVERSED

JAMES D. THOMAS
Administrative Patent Judge

ERROL A. KRASS
Administrative Patent Judge

JOSEPH L. DIXON
Administrative Patent Judge

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